UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

SFUND RECORDS CTR
0820-00192

AR0055

OFFICE OF THE
REGIONAL ADMINISTRATOR

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MEMORANDUM

DATE: November 24, 1993

SUBJECT: Action Memorandum Amendment 2
Request to expand the Scope of Work, increase funding and obtain approval for a $2 million exemption for the Removal Action at the McCormick and Baxter Superfund Site, Stockton, San Joaquin County, CA

FROM: Brad Shipley, On Scene Coordinator
Emergency Response Section, H-8-3

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South Bay Section, H-6-3

TO: Felicia Marcus
Regional Administrator

Category of Removal: Time Critical
CERCLIS ID: CAD009106527
Site ID: 1E

I. PURPOSE

The purpose of this amended action memorandum is to request and document approval for an expanded Scope of Work (SOW), to increase funding, and to obtain approval for an exemption from the $2 million statutory limit for the removal action at the McCormick and Baxter Superfund Site (M&B), located in Stockton, San Joaquin County, California.

The original removal action, approved June 23, 1992 and started July 8, 1992, focused on site stabilization activities. In order to continue removal activities, an exemption from the 12 month statutory limit for removal actions was approved on August 12, 1993. The original action memorandum and action memorandum amendment 1 are attachments 1 and 2 respectively, to this document. Certain sections of the first two action memoranda will be referred to as appropriate throughout this document.

The short term actions described herein meet the criteria for a removal action under section 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

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II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Removal Site Evaluation

The 29 acre former wood treatment facility, located near the intersection of Washington and Pershing Streets in Stockton, California, operated for approximately 50 years. Operations ceased in 1990. Extensive soil and groundwater contamination with pentachlorophenol (PCP), dioxin, creosote, chromated copper arsenate (CCA) and zinc resulted from poor materials management over the operational lifetime of the facility. Concrete sumps and other unlined surface impoundments were receptacles for much of the hazardous waste and excess chemical materials generated from treatment operations.

Buildings and industry hardware, such as chemical holding tanks, treatment pressure vessels (retorts), transfer pipes, boilers, concrete structures and miscellaneous equipment still remain in process areas on-site. The concrete structures are covered with hazardous substances from accumulated sludges and chemical spillage. Accessing potentially contaminated soils beneath contaminated concrete structures is a problem confronting remedial investigators. Preliminary data from July, 1993 RI/FS sampling activities confirmed the presence of highly contaminated surface and subsurface soils directly adjacent to process areas, increasing the urgency to remove structures and conduct characterization activities of soils beneath them. This action memorandum amendment 2 requests approval for funding to remove deteriorating tanks, retorts, transfer pipes, buildings, miscellaneous equipment and debris, concrete structures, and associated hazardous substances that still remain on site.

2. Physical Location

A detailed description of the physical location of the site and its surroundings is provided in attachment 1.

3. Site Characteristics

Figure 1 shows the general layout of the site and the location of process equipment. The sheer quantity and presence of deteriorating tanks, transfer pipes, and their contents poses chemical and physical hazards and prevents access to concrete sumps, void spaces and foundations beneath them. Because of the size of the site and its location in a high crime area, there is an ongoing problem with vandals and trespassers who may inadvertently be injured by these physical and chemical hazards, in spite of 24-hour security and repeated repairs to the fence.

In addition, there are actual and potential chemical hazards from deteriorating asbestos that has become friable in several locations. The deteriorating insulation covering three of the retort vessels, associated pipes and boilers was sampled in August, 1993 and analytical results indicate that it contains 25 to 45 percent chrysotile and amosite asbestos. Further sampling in October, 1993 identified more pipes with insulation contaminated with up to 60% amosite asbestos. These results revealed that the asbestos problem is much larger than originally believed. Some of the asbestos insulated pipes pass under the retorts, through sumps and soil known to be contaminated with PCP, CCA and/or creosote.

4. Release or threatened release into the environment of hazardous substances, pollutants or contaminants

Surface and subsurface soil and groundwater contamination from previous releases of wood treatment chemicals is well documented. The continued exposure and subsequent deterioration of the pipes, tanks, retorts and insulation has resulted in the release and potential release of hazardous substances to the environment. One of the five retorts was recently discovered to be leaking wood treatment chemical residues, and at least one other retort vessel and several chemical storage tanks still contain hazardous substances. Also, an unknown quantity of the process pipes still contain residual sludge or chemical product used in the treatment process. Inaccessible sumps beneath the retort areas, which are not sheltered from weather, are covered with contaminated sludge and chemical spillage. Rain water collecting in these sumps could further cause hazardous substances to migrate through cracks or by leaching, into the soil and groundwater beneath them.

As shown in the photographs provided in attachment 3(c), the asbestos contaminated insulation on exposed retort vessels and pipes is crumbling in several locations. Contaminants, including asbestos, in soils may be released to the air by fugitive dust emissions, to the surface water through erosion and runoff and to the groundwater through saturation and leaching.

5. NPL Status

The listing of the McCormick & Baxter site on the National Priorities List was finalized on October 14, 1992. The Remedial Investigation and Feasibility Study (RI/FS) is currently in progress. EPA plans to issue a Record of Decision (ROD) in FY95.

6. Maps, pictures and other graphic representations

Attachment 3 contains (a) Figure 1, which shows the general layout of the tanks and retort vessels, (b) a copy of a 1989 aerial photograph of the site, and (c) photographs with descriptions.

B. Other Actions to Date

The following removal activities have taken place pursuant to the action memorandum and action memorandum amendment 1: In September 1992, EPA's Technical Assistance Team (TAT) conducted a partial inventory of above ground tanks, retorts and sumps. Additionally, a security fence was installed along the uncontrolled perimeter of the site. In December 1992, TAT neutralized and consolidated samples and other chemicals found in the on-site lab. Results from the August 1993 sampling of insulation on boilers and retort vessels prompted the asbestos removal activities that took place in late October 1993.

Ongoing activities at the site include collection of storm water runoff in three on-site sumps, transfer of collected runoff from the sumps to two clay-lined storage ponds and subsequent discharge into the City of Stockton Publicly Owned Treatment Works (POTW) following chemical analysis of the stored water. Groundwater is continuously pumped from two on-site extraction wells and discharged to the Stockton POTW. The extracted groundwater is routinely sampled and analyzed by ICF Kaiser Engineers, Inc. (ICF Kaiser) under contract to EPA. The extraction wells and the storm water collection system were installed prior to EPA's involvement at the site. Over the last year, soil, sediment and groundwater sampling and analysis has been conducted by ICF Kaiser, EPA's Emergency Response Team (ERT), Ecology and Environment, and by the EPA Region 9 Environmental Services Branch (ESB) as part of the remedial investigation.

C. State and Local Authorities' Roles

Attachment 1 provides a history of the State of California's actions at the site. The State continues to operate as the support agency.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Threat to Public Health or Welfare or the Environment

Threats to public health, welfare, or the environment are posed by the presence and continuing migration of hazardous substances used in the wood treatment industry. Pentachlorophenol, a systemic and reproductive toxin, suspect carcinogen, and metabolic poison found to adversely affect the developing fetus in test animals, is rapidly absorbed upon inhalation, dermal and oral exposure. Fatal amounts can be absorbed through intact skin. Creosote, a complex mixture of over 200 compounds which are predominantly polycyclic aromatic hydrocarbons (PAHs), is a potent toxicant causing both acute and chronic effects in humans. Fatalities have resulted from the ingestion of as little as 7 g by

adults and of about 1-2 g by children. Creosote is also a carcinogen and mutagen.

Chromium toxicity varies depending on the valence form. Chromium (III) is typically less toxic than chromium (VI); however some people have more exposure tolerance than others. Ingestion or inhalation of enough of either form of chromium can lead to adverse health affects and it is not clear which form of chromium is capable of causing lung cancer in workers. Arsenic has been recognized as a human poison since ancient times, and large doses (above 60 ppm in food or water) can produce death. Ingestion at lower levels causes stomach and intestinal irritation with symptoms such as pain, nausea, vomiting and diarrhea. Other effects from swallowing arsenic include decreased production of red and white blood cells, abnormal heart function and an increased risk of cancer in the liver, bladder, kidney and lung. The U.S. Department of Health and Human Services has determined that arsenic and certain arsenic compounds are known carcinogens.

Oral exposure to dioxin causes increased incidence of tumors in liver, tongue, hard palate and lungs in rats, and in thyroid and adrenal glands in mice. EPA classification is B2, a probable human carcinogen. Adverse reproductive effects are caused in a variety of animals. The major observed toxic effect on humans is chloracne. Human exposure through dioxin-contaminated chemicals can also cause altered liver function, porphyria, neurotoxicity, and hyperpigmentation. Toxic effects to acutely exposed animals include extreme weight loss, liver and thymus damage, immunotoxicity, and hepatotoxicity.

Asbestos, another carcinogen, increases the risk of lung cancer, pleural or peritoneal mesothelioma and gastrointestinal cancer. Excess cancers of the larynx have also been observed in exposed workers, individuals living in the neighborhood of asbestos sources and in households having contact with asbestos workers. Cigarette smoking increases the risk of developing bronchogenic cancer in workers exposed to asbestos.

The OSC and RPM believe that a time-critical removal action is necessary and appropriate because conditions at the site pose an unacceptable threat to public health, welfare and the environment. This determination is based on the following criteria, as set forth in 40 C.F.R. Section 300.415(b)(2):

(i). Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations or the food chain

The frequently repaired northern perimeter fence that runs along the bank of Mormon Slough, a popular local fishing area, has repeatedly had holes cut in it by vandals, in spite of the 24 hour security at the site. This has allowed unauthorized access to the site. Consequently, trespassers can potentially be exposed to

hazardous substances by direct contact and ingestion or inhalation of fugitive dust and friable asbestos emissions. A residential area, located 500 feet southwest of the site, could potentially be exposed to fugitive dust emissions from the site. Employees at neighboring facilities could also be exposed through the same pathway.

Mormon Slough also contains contaminants that have migrated from the site. In addition to documented releases of hazardous substances from the site into the slough, the presence of hazardous substances in deteriorating tanks, retorts, sumps and pipes has the potential for future releases. Concrete sumps and foundations that have become saturated with hazardous substances from chemical spillage may continue to be a source for contaminant migration into surrounding soils and groundwater.

(iv). High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate

Asbestos lagging is friable, and is presently crumbling off the retort vessels and pipes and falling on the surface soils near the source. Contaminated surface soils can migrate offsite by wind and storm runoff. Cracks in chemically saturated deteriorating concrete sumps are a pathway for migration of contaminated sludge and other hazardous residues.

(v). Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released

Weathering of exposed tanks, retorts and pipes has compromised their integrity, which may lead to additional hazardous substance releases. Further weathering of asbestos insulation will increase the rate of deterioration and the potential for migration off site and/or exposure to nearby populations. Very strong summer winds in the Stockton area can accelerate the deterioration of asbestos and the rate of off-site migration. Exposed sumps and concrete pads collect rain water which can cause further migration of hazardous substances through cracks in the concrete or by seepage and leaching.

(vii). The availability of other appropriate federal or state response mechanisms to respond to the release

Required actions clearly exceed the capacity of the State emergency reserve account. The trust fund, established as part of the Chapter 11 bankruptcy proceedings in which M&B was involved, is not sufficient to fund the proposed time critical removal activities. The Army Corps of Engineers' (Corps) rapid response mechanism may be utilized to complete discrete tasks in the proposed removal actions. The RPM is currently investigating the Corps' response capabilities.

(viii). Other situations or factors that may pose threats to public health or welfare or the environment

The deteriorating integrity of the buildings, structures, tanks, overhead pipes and sumps also pose a severe physical hazard to personnel at the site, including possible trespassers. The large quantity of process equipment, abandoned machinery and electrical hardware is attractive to vandals because of its monetary value. As long as these items remain on site, vandalism will be a problem and chemical exposure or physical injury will be a risk. The situation at the site presents many accidents waiting to happen, as the photographs in attachment 3(c) illustrate.

IV. ENDANGERMENT DETERMINATION

Actual and threatened releases of hazardous substances from this site, including asbestos, pentachlorophenol, creosote and other wood treatment chemicals, if not addressed by implementing the response action selected in this action memorandum amendment 2, will continue to present an imminent and substantial endangerment to public health, or welfare, or the environment.

In accordance with OSWER Directive 9360.0-34 and Delegation 14-14-A, ERS has consulted with Headquarters' Office of Solid Waste and Emergency Response in making this endangerment determination.

V. EXEMPTION FROM STATUTORY LIMITS

This proposed removal action meets the CERCLA section 104(c) criteria for a consistency exemption from the $2 million statutory limit because continued response actions are otherwise appropriate and consistent with potential remedial actions to be taken. Any foreseeable future reuse of the site or potential comprehensive remedy for contaminated soils will necessitate the demolition and removal of the dangerously deteriorating tanks, retorts, transfer pipes, buildings, concrete structures and associated hazardous substances that still remain on site; therefore the proposed actions are consistent with potential remedial actions to be taken. The proposed actions are also appropriate because they will mitigate the physical and chemical threats posed by equipment and hazardous substances at the site and reduce the potential for further migration of contaminants from the site.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. <u>Proposed Actions</u>

1. Proposed action description

The proposed removal action consists of two phases. Phase I is currently addressing mitigation of the asbestos hazard and is continuing the inventory, characterization, and disposal of all

hazardous substances remaining on-site in the retort vessels, tanks and other containers. These are activities within the scope of the original action memorandum and the first amendment. However, primarily because of the recent discovery of the large quantity of deteriorating Asbestos Contaminated Material (ACM), completion of these activities will cost more than originally estimated; therefore, we are asking for a ceiling increase for these activities in this action memorandum amendment 2.

In an effort to identify potential source points and gain access to contaminated soils and groundwater, phase II of the proposed removal action is much more labor intensive. The work will consist of dismantling the retort vessels, pipes, boiler rooms, foundations, tanks, sumps, berms and any other building and structure that may create a physical or chemical hazard. Except as otherwise described below, the tanks, retort vessels and pipes will be cut up, decontaminated and recycled as scrap metal, unless removal of gross contamination is cost prohibitive, in which case, it will be characterized, profiled and properly disposed of as hazardous waste. Selling and reuse of some of the retort vessels and tanks that are in good condition is also an option currently being investigated. Scrap metal decontamination will be conducted on an existing concrete pad with a drain and sump that will collect wash water. Collected water will be stored in a designated tank for disposal to the POTW if analytical results reveal acceptable levels of contaminants. A portable activated carbon treatment system can quickly and inexpensively be constructed to treat wash water which may not be discharged to the POTW should that prove necessary.

Hazardous waste generated from phase I & II actions will be accumulated, segregated according to waste stream, and bulked as it is discovered. Disposal will occur after all waste generating activities have been completed. On-site relocation of contaminated soil or sludges may be required in order to complete demolition activities. Contaminated soils will be addressed through the remedial process. Components and estimated costs of phase I and II activities are discussed in their expected order of occurrence below. Total project cost estimates, and a summary of the extramural (contractor) cost estimates listed with each task description are provided in Table 1 at the end of this section.

Phase I: Asbestos Mitigation and Process Chemicals/Sludges

Asbestos Mitigation

Asbestos mitigation requires the construction of negative air enclosures around the work area along with a comprehensive air monitoring strategy. ACM covers boilers and pipes in the small and large boiler rooms. ACM also completely covers two of the retort vessels, rueping tanks, associated pipes and the end caps on two other retort vessels. The retort vessels alone are 150 feet long

and 6-8 feet in diameter. The total amount of ACM to be removed is roughly estimated at 250 yards.

Because of the size of the work area and the large quantities of asbestos involved, two separate negative air enclosures are needed, one over the boiler rooms and one over the two asbestos covered retort vessels. Other ACM on exterior pipes and the end cap on the cellon processing retort will be glove bagged. ACM will be wet down with water, removed in an organized manner, double bagged, labeled and placed in dumpsters for proper disposal in the Calaveras County, California Asbestos Monofill (CAM). ACM that has become contaminated with wood treatment chemicals will require incineration or disposal at a hazardous waste landfill, which is more costly than disposal at CAM. This will be determined by visual inspection of ACM taken from the sumps beneath the retort vessels, which has contacted contaminated sludge and soil. The duration and cost estimate for removal of ACM is approximately 40 days and $480,000 respectively. This cost estimate for phase I, listed below, includes the current approved ceiling. Other costs include subcontracts, disposal, per diem and lodging, and other miscellaneous items.

Contractor Costs:	Current ceiling	Phase I increase	Phase I ceiling
Personnel	$150,000	$200,000	$350,000
Equipment	25,000	30,000	55,000
Materials	10,000	30,000	40,000
Other Costs	40,000	50,000	90,000
Phase I Total	$225,000	$310,000	$535,000

Note: Approximately $60,000 of the current ceiling was utilized for previous removal activities, which are described above.

Process Chemicals/Sludges

Some process chemicals, such as copper napthanate and oily waste or sludge contaminated with creosote and PCP, still remain in on-site storage tanks, retort vessels and other miscellaneous containers. These chemicals will be inventoried, characterized, and bulked with compatible waste streams or segregated, as they are discovered during the implementation of these proposed actions. Profiling, recontainerization and proper disposal or recycling will occur when all potential waste generating activities have been completed. Since these hazardous substances have not been completely characterized or quantified and disposal costs can vary, it is difficult and premature to accurately estimate costs for this task, however, at this time they are not a significant part of the total project cost and are not expected to exceed $100,000. This disposal cost is accounted for in the "other cost" section of the individual task estimates.

Phase II: Dismantling of Site Structures

Transfer Pipes and Extraneous Hardware

A large amount of pipes were used to transfer the various process chemicals between storage tanks, boilers and retort vessels. Some of the pipes are in underground trenches that connect the tank farm and main process areas. The attached photographs showing the pipes around and under the main retort area provides a good indication of the quantity of pipe that requires removal before access to the retorts and the sumps beneath them can be gained. Pipe removal activities will include cutting in a logical sequence, visual inspection for chemical residue, decontamination with high temperature, high pressure spray and recycling as scrap metal. Pipes that are grossly contaminated with sludge will be segregated, characterized and properly disposed of as hazardous waste. Chemical product discovered in the pipes during cutting operations will be collected for proper disposal. If possible, uncontaminated pipes, valves and other plumbing components that are in good enough condition will be recycled or disposed of as otherwise appropriate.

Extraneous hardware includes metal ladders, platforms, walkways, and railings used for safe worker access, as well as pipe supports, framing, trusses and electrical equipment. As with the pipes, most of these items will be cut up in a logical sequence, cleaned and recycled as scrap metal. Electrical equipment that is no longer used will be disconnected, dismantled and recycled or reused, as appropriate. A separate, less costly electrical system will be installed to satisfy power requirements for the office, groundwater pumps, storm water collection and treatment systems and other miscellaneous items. The cost estimate, detailed below, for contractor support for this task is $200,000, and it is estimated to take 28 days to complete.

Contractor Costs:	Personnel	$120,000
	Equipment	20,000
	Materials	15,000
	Other Costs	45,000
Task Total		$200,000

Retort Vessels

Retort vessels have other components, such as rueping and condenser tanks, associated with them. Of the five retort vessels on-site, at least two may be reusable. Options for their reuse are currently being investigated. Retort vessels are designed and certified to withstand internal pressures on the order of 150 psi, consequently they are made of very thick steel which is difficult to cut. Retort vessels that can not be reused, due to their age or lack of proper certification, will be cut, cleaned, inspected,

sampled if necessary, as determined by visual inspection, and disposed of as scrap metal. Retort vessels that can be reused will be cut into transportable sections prior to shipment. One of the retort vessels contains approximately 3000 gallons of sludge, which will require removal before the vessel can be dismantled.

The cost estimate, detailed below, for this task, assuming that none of the five retorts have reuse value, is $400,000, and it is estimated to take up to 60 days to complete.

Contractor Costs:	Personnel	$233,000
	Equipment	87,000
	Materials	26,000
	Other Costs	57,000
Task Total		$403,000

Tanks

The majority of the tanks are centrally located in the tank farm and Cellon processing areas. A few smaller tanks are scattered throughout the site. Most of the tanks have been emptied and cleaned, however some of them still contain hazardous substances and will have to be cleaned prior to disposal. As with the retort vessels, tanks that are not of any reuse value will be cut, cleaned, inspected and recycled for their scrap value. The estimated contractor costs for cutting and removing all the tanks, which is expected to take 35 days to complete, is $284,000.

Contractor Costs:	Personnel	$145,000
	Equipment	57,000
	Materials	17,000
	Other Costs	65,000
Task Total		$284,000

Buildings and Other Nonhazardous Equipment or Debris

Buildings, boilers and other nonhazardous structures will be demolished with heavy equipment and disposed of as construction debris. Miscellaneous machinery such as pumps, compressors and other items used in the industry, will be separated for reuse or recycled as scrap metal. Vendors have already expressed an interest in some of these items, as well as in the treated wood products that still remain on-site. We will attempt to arrange for items with value to be sold by the owner.

Because of the size and duration of this task, demolition of the boiler rooms has been further separated out as an activity within this task. Approximately $160,000 of the $334,000 estimated total cost for this task, detailed below, is for demolition of the boiler rooms, which is expected to take 21 days to complete. The

remaining $174,000 is for demolition of other site structures which is expected to take approximately 28 days to complete. Demolition of some uncontaminated structures, such as the scotch kiln, may be subcontracted through ERCS or other appropriate contractor.

Contractor Costs:	Boiler Rooms	Other Structures	Task Total
Personnel	$87,000	$116,000	$203,000
Equipment	40,000	19,000	59,000
Materials	11,000	3,000	14,000
Other Costs	23,000	36,000	59,000
Task Total	$161,000	$174,000	$335,000

Concrete Sumps and Foundations

Designated concrete foundations, floors, sumps and berms will require demolition with appropriate construction equipment. If possible, nonhazardous concrete rubble will be segregated by visible inspection, confirmed by laboratory analysis and disposed of as nonhazardous material, otherwise, it will be securely staged on site for future remedial action activities. Disposing of contaminated concrete at this time might be inconsistent with future remedial actions because it is conceivable that treatment options for contaminated soil would also be applicable to contaminated concrete. The estimated contractor cost for this task is $285,000 and the expected duration is 35 days. A breakdown of the costs is shown below.

Contractor Costs:	
Personnel	$145,000
Equipment	62,000
Materials	16,000
Other Costs	30,000
Task Total	$253,000

2. Contribution to remedial performance

Since the original removal action began, soil, sediment and groundwater sampling has been completed in all accessible areas at the site. PCP and PAHs have been found at depths of up to 50 feet below ground surface (bgs) directly adjacent to the area of the proposed removal action, indicating that a significant amount of contamination may exist under the structures. Of particular concern are the high levels of dioxin that have been detected at shallower depths in this area. Until the tanks and other structures are removed, soil characterization cannot be completed, thus delaying remedy selection. The removal of these structures will also allow the completion of additional groundwater investigations in areas that are currently inaccessible. Thus, the proposed removal action will contribute to early remedial actions for both the soil and groundwater operable units at the site.

3. Description of alternative technologies

No alternative technologies were considered for this removal action. Asbestos mitigation procedures are routine and clearly specified in the appropriate regulations. Dismantling of tanks and structures also does not require significant technical analysis of alternatives, although different tank and retort cutting approaches will be assessed (plasma torch vs. acetylene). When possible, scrap metal will be recycled instead disposed of as hazardous waste. Treatment and/or disposal alternatives for contaminated soils excavated as part of this removal action will be evaluated in the ROD. Since characterization of potentially contaminated concrete under structures to be removed cannot be conducted, the alternatives for its disposal cannot be evaluated at this time.

4. Applicable or Relevant and Appropriate Requirements (ARARs)

The proposed action shall, to the extent practicable, considering the exigencies of the situation, attain ARARs under federal or state environmental or facility siting laws. Other federal and state advisories, criteria or guidance may, as appropriate, be considered in formulating the removal action.

The wastes generated during this removal will be characterized to determine if they are regulated under the California Hazardous Waste Control Act ("HWCA"), H & S Code § 25100 et seq.; CCR Title 22, §§ 66260, 66264 and 66268 et. seq., which is the federal ARAR pursuant to the delegation of the federal RCRA program to the State of California on August 1, 1992. Once determined to be hazardous waste, materials stored on-site will be handled to the extent practicable (packaged, labelled, stored, transported, and recycled or disposed) in accordance with the substantive requirements of HWCA, and the above referenced regulations adopted thereunder. The Land Disposal Restrictions ("LDRs") adopted under Title 22, §§ 66268 et seq., which regulate the placement of most hazardous wastes that have been excavated, will be complied with to the extent practicable. The National Emission Standard for Asbestos, 40 C.F.R. Part 61, Subpart M, also will be complied with to the extent practicable. Off-site treatment, storage and disposal of wastes will be performed in accordance with applicable federal, state and local laws, regulations and ordinances and the EPA Off-Site Policy. (These are not ARARs under CERCLA, as ARARs apply only to on-site activities.) All non-RCRA wastes will be disposed of in an appropriate manner.

5. Project schedule

Phase I activities, authorized by the original action memorandum and action memorandum amendment 1, began on October 25, 1993. The asbestos work is expected to continue until mid-December 1993 with a Thanksgiving break from the 19th to the 29th of November. A few of the tasks discussed above, such as accumulation of waste for disposal and dismantling of tanks, pipes and hardware, will overlap or be conducted concurrently. Phase II scheduling is pending approval of this action memorandum amendment and obtaining funding from headquarters. Phase II is estimated to require 4 to 5 months of on site activities that could start as soon as mid-January 1994 if approval and funding is obtained.

B. Estimated Costs

Although this document seeks approval for the overall project ceiling, actual financing of the proposed actions may be obtained on a task-by-task basis. The Phase II increase shown below in Table 1, combines estimates for the tasks discussed individually above.

Table 1: Total Estimated Project Costs

	Current Ceiling	Phase I Ceiling Increase	Phase II Ceiling Increase	Project Total
Extramural Costs:				
Contractor Personnel	$150,000	$200,000	$846,000	$1,196,000
Contractor Equipment	25,000	30,000	285,000	340,000
At Cost Materials	10,000	30,000	88,000	128,000
Other Costs	40,000	50,000	256,000	346,000
Contractor Subtotal	225,000	310,000	1,475,000	2,010,000
USCG-PST	30,000	0	45,000	75,000
Extramural Subtotal	255,000	310,000	1,520,000	2,085,000
20% contingency	51,000	62,000	304,000	417,000
Extramural Subtotal	306,000	372,000	1,824,000	2,502,000
TAT costs	100,000	0	100,000	200,000
Extramural Subtotal	406,000	372,000	1,924,000	2,702,000
15% Project Contingency	0	56,000	289,000	345,000
Total Extramural Cost	**406,000**	**428,000**	**2,213,000**	**3,047,000**
Intramural Costs:				
EPA Regional	50,000	0	100,000	150,000
EPA HQ	5,000	0	10,000	15,000
EPA Indirect	100,000	0	150,000	250,000
Total Intramural Cost	**155,000**	**0**	**260,000**	**415,000**
Project Total	**$561,000**	**$428,000**	**$2,473,000**	**$3,462,000**

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VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If action is delayed or not taken, conditions at the site will continue to deteriorate, increasing the potential for off site migration of hazardous substances, additional releases, and exposure to nearby residents and site workers to hazardous substances. Delaying the action will adversely impact remedial scheduling and is likely to lead to an increase in overall clean-up costs. Physical hazards will also continue to pose safety concerns to site workers and trespassers.

VII. OUTSTANDING POLICY ISSUES

None have been identified at this time.

VIII. ENFORCEMENT

The confidential enforcement information is included as an addendum to this action memorandum amendment.

IX. RECOMMENDATION

This decision document represents the selected removal action for the McCormick & Baxter site, in Stockton, San Joaquin County, California, developed in accordance with CERCLA as amended, and not inconsistent with the NCP. This decision is based on the administrative record for the site.

Site conditions continue to meet the NCP section 300.415(b)(2) criteria for a removal and the CERCLA section 104(c) consistency exemption. We recommend your approval of a ceiling increase of $2,901,000 of which $428,000 comes from the removal Advice of Allowance, and an exemption from the statutory limit of $2 million for completion of this removal action. We are also pursuing obtaining partial or full funding through the $50 million remedial set aside fund administered by headquarters. If we are unable to access this fund for this action, the remaining extramural increase of $2,213,000 will be obtained through incremental obligations from the removal Advice of Allowance. With your approval of this action memorandum amendment, the total project ceiling will be $3,462,000.

Approved:

John Wise

Felicia Marcus for
Regional Administrator

11.24.93
Date

Disapproved:

Felicia Marcus
Regional Administrator

Date

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105-3901

MEMORANDUM

Date: July 29, 1993

Subject: **Action Memorandum Amendment 1**
Request for a 12-month Exemption, McCormick and Baxter Superfund Site, Stockton, CA

From: Brad Shipley, On-Scene Coordinator
Emergency Response Section, H-8-3

To: Jeffrey Zelikson, Director
Hazardous Waste Management Division, H-1

I. Purpose

The purpose of this Action Memo Amendment is to request, and document approval of, an exemption of the statutory limit of 12 months at the McCormick and Baxter Superfund Site (M&B), located in Stockton, California. The additional time necessary to complete this action is anticipated to be less than one year.

II. Site Conditions and Background

A. Site Status: NPL (Final: October 14, 1992)
Category of Removal: Time-Critical
CERCLIS ID: CAD009106527
Site ID: 1E
Action Memo Signed: 06/23/92
Removal Action Start Date: 07/08/92

B. The McCormick & Baxter Creosoting Co. (M&B), a wood preserving company, operated on a 29-acre site in Stockton, California, from 1942 until 1991. The northern boundary of the site borders Old Morman slough, which empties into the Port of Stockton turning basin on the San Joaquin river.

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M&B used various wood preservation processes which included the use of formulations of creosote, pentachlorophenol (PCP), and chromium, copper, arsenic (CCA) and zinc. Improper use, storage and disposal of these substances resulted in soil, groundwater and equipment contamination. When the facility shutdown in June 1991, many hazardous substances were abandoned in various containers (tanks, retort vessels, drums, etc.) throughout the site. These abandoned hazardous substances and containers are the subject of the removal action.

C. For a more detailed discussion of the sections presented in this 12 month exemption request, refer to the attached original action memorandum. Updated information is provided in this amendment and may supersede information reported in the original action memorandum.

D. EPA has initiated investigations to determine the scope and extent of the groundwater and soil contamination. These reports are due within the next year. In addition, EPA has initiated several treatability studies to evaluate alternatives for treating the hazardous substances on the site.

EPA originally planned to issue a Record of Decision (ROD) for the site within one year. However, the investigations have been more complicated than originally envisioned, consequently the ROD addressing soil contamination at the site is currently planned for the fourth quarter of 1994. In addition, the ROD addressing groundwater contamination at the site is currently also planned for fourth quarter of 1994.

The portion of this removal action taken pursuant to the original Action Memorandum consisted primarily of stabilization of the hazardous substances on the site, and addition and repair of the fence surrounding the site. The fence was extended to completely surround the property, and a portion of the existing fence was repaired. As part of the stabilization, lab chemicals were removed and disposed of, and several tanks were investigated to determine if hazardous substances remained in them. Most tanks were determined to be clean; however, the retorts were inaccessible. Their integrity was determined to be adequate in the event that they did contain hazardous substances; therefore, no further action appeared warranted at that time. These activities took less than the six months originally planned for the removal.

EPA originally anticipated that the fence would provide adequate security for the site. Subsequently, there has been a substantial amount of vandalism, which has caused EPA to provide a security service to prevent unauthorized access

to the site. This vandalism has also created the potential for additional releases of hazardous substances at and from the site. The asbestos lagging surrounding the retorts was in good condition during the summer of 1992; however, currently, the asbestos appears friable and is falling off the retorts. It appears that the retorts and the asbestos lagging were vandalized; the rain then apparently soaked the asbestos and caused it to fall off and become friable.

In addition, the integrity of several of the retorts has recently been found to be less adequate than originally believed. Two of the retorts have apparently begun to leak, resulting in a release of hazardous substances at this site.

III. Threats to Public Health or Welfare or the Environment, and Statutory and Regulatory Authorities

The threats to public health or welfare or the environment and statutory and regulatory authorities are discussed in the appropriate section of the attached June 23, 1992 Action Memorandum.

IV. Exemption From Statutory Limits

Investigations have been initiated to determine the extent of soil contamination at the site as part of the Remedial Investigation. Samples are currently undergoing analysis. The soil portion of the Remedial Action is anticipated to remediate surface and subsurface contamination at the site. Removing sources of contamination will contribute to the efficient performance of any of the contemplated soils remedies by further stabilizing the site. Therefore, the removal action continues to meet the CERCLA section 104(c) consistency exemption criteria. Continued response actions are appropriate and consistent with future remedial alternatives. These removal activities are necessary to avoid a foreseeable threat and prevent further migration of contaminants.

V. Proposed Actions and Estimated Costs

Removal activities completed so far include the installation of a perimeter fence and disposal of lab chemicals from the on-site laboratory. The 12 month exemption is being requested so that the following planned additional removal activities can proceed:

- removal and disposal of asbestos lagging around the retort vessels that is breaking apart and in danger of being blown off site, and,

- cleaning out and disposal of hazardous substances, including creosote sump sludge, PCP waste and copper naphthalene, in drums, barrels, tanks and other containers, including the retorts, and disposal of containers, when appropriate.

The cost of these proposed actions will not exceed the current project ceiling of $561,000. Less than $100,000 has been spent to date, therefore no additional funding is being requested at this time. A detailed cost breakdown is provided in the attached action memorandum.

VI. Recommendation

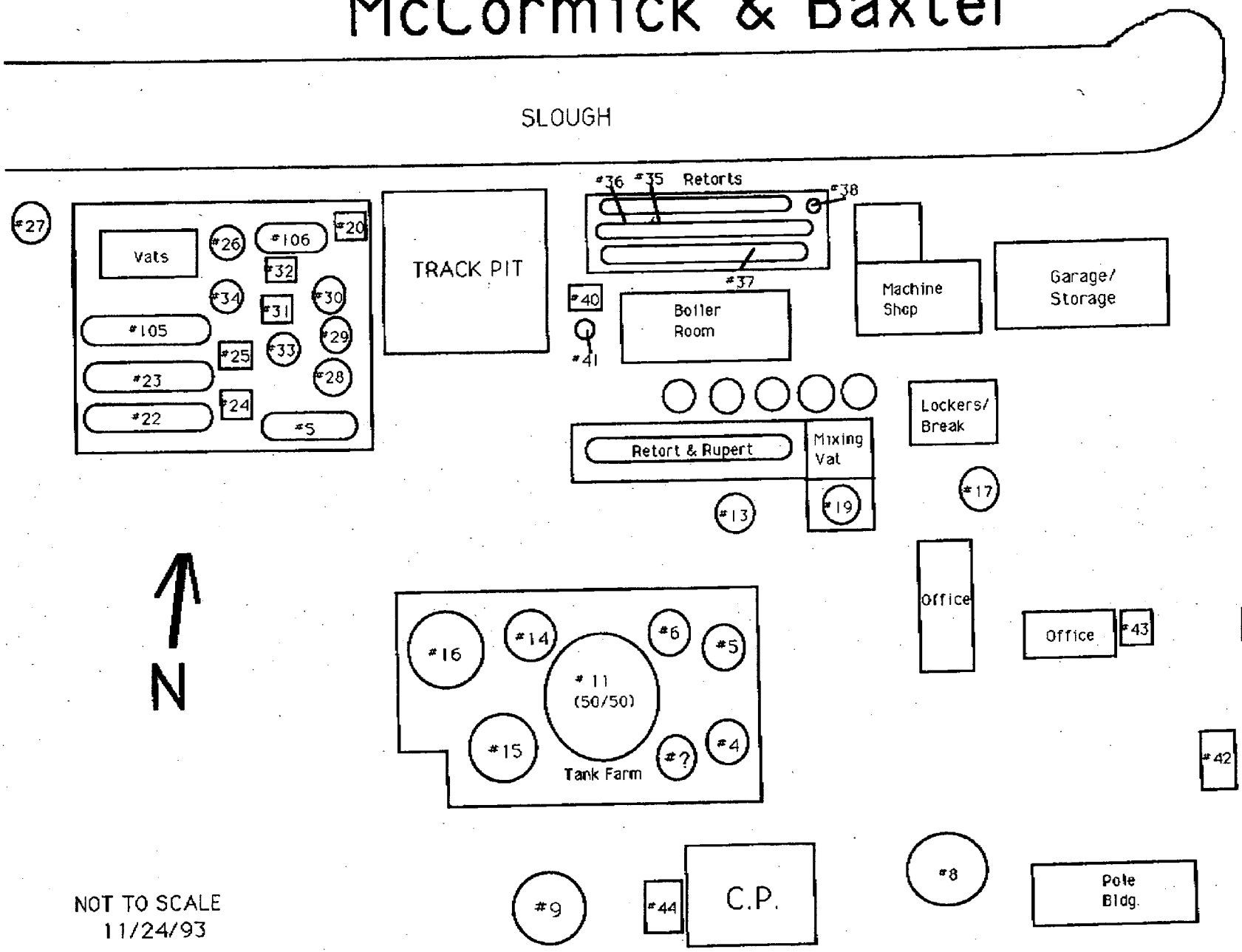
Site conditions continue to meet the NCP section 300.415(b)(2) criteria for a removal and the CERCLA section 104(c) consistency exemption. I recommend your approval of an exemption to the statutory limit of 12 months for completion of this removal action.

Laura Yoshii for Jeff Zelikson — August 2, 1993

Approval Signature — Date

Disapproval Signature — Date

Figure 1: General Site Layout



** TOTAL PAGE.002 **

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105-3901

June 23, 1992

MEMORANDUM

SUBJECT: Request for Removal Action Approval at the McCormick & Baxter Site (M&B), Stockton, CA **ACTION MEMORANDUM**

Site ID: **1E**
Category of Removal: **Time critical**
Nationally Significant or Precedent Setting: **No**

FROM: Kelly S. McCarty, Remedial Project Manager
South Bay Section, (H-6-3)

TO: Jeff Zelikson, Director
Hazardous Waste Management Division, (H-1)

I. PURPOSE

The purpose of this memo is to request funding approval for CERCLA-funded site stabilization removal activities at the subject site. Conditions presently exist at the site which, if not addressed by implementing the response action documented in this Action Memorandum, may lead to human exposure to hazardous substances and the additional off-site migration of contaminants which may pose an imminent and substantial endangerment to the public health or welfare or the environment.

The conditions at the site meet the criteria for initiating a removal action under Section 300.415 of the National Contingency Plan and are anticipated to require less than twelve months and $2 million for completion. The removal action would employ the services of the ERCS contractor to provide for the installation and repair of the perimeter fence, and the removal and proper stabilization, treatment, recycle and/or disposal of identified hazardous substances presently on site.

II. SITE CONDITION AND BACKGROUND

A. Site Description

1. Physical Location

The McCormick & Baxter Creosoting Co. (M&B), a wood preserving company, operated on a 29-acre site at the

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intersection of Washington and Pershing Streets in Stockton, California, from 1942 until 1990. The site is located in an industrial area near the junction of the I-5 interchange in the Sacramento-San Joaquin delta in the Great Central Valley of California. The northern boundary of the site borders Old Mormon Slough, which empties into the Port of Stockton turning basin on the San Joaquin River.

There are no residences, public areas or facilities within 200 feet of the site. Approximately 105,000 people live and work within four miles of the site; about 3100 live within one mile of the site, and 756 work at an adjacent industrial facility within 250 feet of the site.

A population of approximately 170,000 is associated with drinking water wells within four miles of the site. Wells that draw from a deeper interconnected aquifer provide drinking water to approximately 97,000. None of the drinking water wells are located directly downgradient of the site or appear currently threatened by the groundwater plume beneath the site. Shallow groundwater beneath the site is not used for drinking purposes due to high levels of total dissolved solids caused by salt water intrusion from Mormon Slough. People regularly use the Mormon Slough and the San Joaquin River in the vicinity of the Port of Stockton for fishing.

2. General Character

According to previous drilling and geophysical logging, the character of the upper 250 feet of sediments beneath the site is predominantly silt and clay, with several discontinuous beds of fine- to medium- grained sand and silty sand up to 15 feet thick. A deep aquifer beginning at a depth of 225-250 feet below ground surface (bgs) serves as an industrial water supply for the Gold Bond Wood Products (Gold Bond) facility, approximately 1000 feet southeast of the M&B site.

Groundwater is encountered between 11 and 23 feet bgs. Groundwater flows in an easterly direction, although its movement is influenced by the Gold Bond wells. The hydrogeologic investigation conducted by the consultant for M&B concluded that there is recharge from surface water to groundwater in the area.

McCormick & Baxter used various wood preservation processes standard in the industry, including processes using formulations of creosote, pentachlorophenol (PCP), and chromium, copper, arsenic and zinc. In the past, waste oils and drippage generated from the wood treatment process were disposed of in unlined ponds and in concrete tanks on site.

There are 30 on-site and six off-site monitoring wells. Three on-site extraction wells are operating; discharge of the untreated groundwater is to the City of Stockton POTW. A temporary soil polymer coating was applied to portions of the site in 1990.

In December, 1988, M&B filed a voluntary petition for bankruptcy under Chapter 11 of the bankruptcy code. EPA was not given notice of the bankruptcy and did not participate. The bankruptcy was confirmed and has been in effect since December, 1990. M&B originally contemplated reorganization and continued operation at the Oregon facility in accordance with a court approved plan. However, in October, 1991, M&B's primary creditor claimed that M&B was in violation of the confirmed plan, and forced M&B to cease all operations.

3. NPL Status

The site was proposed for inclusion on the NPL in February, 1992, and is currently being addressed through EPA's pilot program the Superfund Accelerated Cleanup Model (SACM). This program allows EPA to begin addressing sites, before they have been listed as final on the NPL, in an effort to shorten the cleanup process. Plans are currently underway to begin the Remedial Investigation (RI) and the Feasibility Study (FS). EPA plans to issue the Record of Decision for the site within one year.

4. Removal Site Evaluation

M&B ceased operations at the Stockton facility in June, 1991. When M&B mothballed the facility, they cleaned out some of the operational tanks, but not all. As a result, several tanks remain on the property that still contain hazardous materials. In addition, there are several areas underneath the process tanks that contain what appears to be creosote-contaminated sludge, and site security is a problem. Since M&B abandoned the site in October, 1991, the secured creditor and the State of California provided site security, i.e., a 24-hour per day, 7 day per week, guard service. The State plans to stop that service on June 26, 1992.

The fence surrounding the site has been cut and the site is accessible from the unfenced banks along Old Mormon Slough. In addition, the site has no signs around the facility that warn that it is a hazardous waste site. Discontinuation of the security would allow access by passersby to the contamination on the site.

5. Release or Threatened Release into the Environment of a Hazardous Substance, Pollutant, or Contaminant

Sources at the site include the oily waste ponds, the concrete oily waste tank, a paved pole washing area, underground and aboveground storage tanks, oil/water separators, condensate storage tanks, storm water collection sumps, a blowdown tank, boiler room sumps, and contaminated soils. Chemicals and sludge remain in several of the tanks and in one retort.

A recent site visit revealed that one of these aboveground tanks is leaking a black, oily substance. The integrity of the oil/water separator is not known, but is not expected to be good, in which case it continues to be a potential source for groundwater contamination.

B. **Other Actions to Date**

Prior to the abandonment of the property by M&B, a great deal of investigations had been performed by the company. They had performed the equivalent of an RI, and had prepared an FS and a Remedial Action Plan for the State, which were never approved by the State or EPA. Initially, M&B had anticipated continuing operations at the Oregon facility, so that all equipment and materials of any value were shipped up to that facility, including many of the usable chemicals. In addition, some of the aboveground storage tanks were emptied and cleaned.

C. **State and Local Agencies' Roles**

1. State and local action to date

Prior to 1977, storm water runoff from the site was discharged directly to Mormon Slough. In 1977, the California Department of Fish & Game (DFG) investigated a fish kill involving both Mormon Slough and the Port of Stockton. The DFG study established that storm water runoff from the M&B site, contaminated with PCP, was responsible. In response to a Regional Water Quality Control Board (RWQCB) Cleanup and Abatement Order, M&B installed two storm water collection ponds and constructed a perimeter dike around most of the site.

The California Department of Health Services (now the Department of Toxic Substances Control - DTSC) issued a RCRA Hazardous Waste Facility Permit to M&B in 1984 for the firm's concrete oily water treatment tank and for a drum storage area; the storm water collection ponds were placed

under interim status. M&B completed a RCRA clean closure of the oily waste treatment tank and the drum storage area in 1990; however, EPA currently has no confirmation of the adequacy of this action.

In 1984, M&B entered into an agreement with DTSC and the RWQCB to clean up contamination at the site. Between 1983 and 1988, M&B consultants conducted soil and groundwater sampling. M&B submitted soil and groundwater investigation reports, a Baseline Public Health Assessment, Feasibility Study (FS) report and Remedial Action Plan (RAP) to the state agencies; however, these plans were not approved by the agencies.

2. Potential for continued State and local response

Since proposal for inclusion on the NPL, the EPA has taken over the role as lead agency at the site. The DTSC continues to actively support the EPA in its role as lead agency; however, DTSC does not have the funds to continue to perform much independent work.

Under the plan of reorganization, an environmental trust fund was created for use in environmental restoration at the facility. The State is the named beneficiary of the funds accumulated in this Trust Fund. With the approximately $100,000 currently remaining in the trust fund, the State is paying the utilities at the site and maintaining the pump and discharge system. Recently, however, a problem with the maintenance of the pumps has arisen, so that EPA will be assuming this responsibility through its remedial contractor. Other actions may be negotiated with the State in the future for the expenditure of the balance of the fund monies. No other type of state or local response is expected at this site, at this time.

III. THREAT TO PUBLIC HEALTH OR WELFARE OR TO THE ENVIRONMENT

A. **Threats to Public Health and Welfare**

Threats to the public health, welfare, or the environment are posed by the existence and ongoing release of wood treating wastes containing creosote, pentachlorophenol and copper chromated arsenic at the site. Pentachlorophenol is know to affect the cardiovascular system, respiratory system, eyes, liver, kidneys, skin and central nervous system. Chromium is a carcinogen, and is known to affect the respiratory system. Arsenic is a carcinogen, and is known to affect the liver, kidneys, skin, lungs and the lymphatic system.

1. Actual or Potential Exposure to Hazardous Substances, Pollutants or Contaminants by Nearby Populations or the Food Chain

This is present due to wood treating wastes in the process area which may enter the groundwater or Mormon Slough. Fishing is known to be popular in Mormon Slough, and contaminants have been found in the fish.

2. High levels of Hazardous Substances, Pollutants, or Contaminants in Soils at or Near the Surface, That May Migrate

High levels of pentachlorophenol and creosote have been documented in several locations at the site, including the track pit area, near the treatment area.

B. **Threats to the Environment**

Soil and groundwater contamination exist on the site. Contamination of the adjacent Mormon Slough has been documented through sampling of the fish in the slough. Significant levels of dioxin have been detected in the fish.

Several species that are candidates for federal endangered species designation are believed to live within four miles of the site.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of pentachlorophenol, copper chromated arsenic, and creosote or other hazardous substances from this site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed Action Description

The proposed action will accomplish the following activities:site security - repair of the broken areas in the fence, adding fencing to completely surround the facility, and placing signs at even intervals around the site; and, investigation and disposal of all contaminated material in the various tanks and treatment cylinders on the property.

There are approximately fifteen tanks, and five retort cylinders remaining on the property. Some of the tanks and cylinders were reportedly cleaned by M&B; however, some of them still contain hazardous materials/wastes.

2. Contribution to Remedial Performance

The proposed action will contribute to the efficient performance of the remedial process by stabilizing the site. Due to the fact that the remedial process has just begun on this site, the ultimate cleanup action has not been determined. This action will be consistent with any remedial action, since the site will then be secure, and many of the sources will be removed.

3. Description of Alternative Technologies

A final determination of the disposal technology cannot be determined at this time, since the amount and exact composition of the wastes is unknown. Land disposal will be avoided if at all possible, and onsite treatments preferred. Biodegradation is a distinct possibility for the anticipated wastes at this site.

4. Applicable or Relevant and Appropriate Requirements (ARARs)

ARARs may include federal and state regulations. The proposed action shall, to the extent practicable, considering the exigencies of the situation, attain ARARs under federal or state environmental, or facility siting, laws. Other federal and state advisories, criteria, or guidance may, as appropriate, be considered in formulating the removal action.

All wastes generated during this removal will be characterized to determine if they are RCRA regulated. All RCRA regulated wastes will be packaged, labelled, stored, transported, and recycled or disposed of as per RCRA requirements. All non-RCRA wastes will be disposed of in an appropriate manner.

5. Project Schedule

This action is expected to last less than six months in duration, and will begin on June 26, 1992, providing this memorandum is signed expeditiously.

B. **Estimated Costs**

Extramural Costs:		
Regional Allowance Costs	$225,000	
Other Extramural Costs		
USCG IAG	30,000	
Subtotal Extramural Costs	$255,000	
Extramural Costs Contingency (20%)		51,000
TOTAL EXTRAMURAL COSTS	**$306,000**	
Intramural Costs:		
Direct Costs	50,000	
ERT Costs	100,000	
HQ Costs	5,000	
Indirect Costs	100,000	
TOTAL INTRAMURAL COSTS	**$255,000**	
TOTAL REMOVAL PROJECT CEILING	**$561,000**	

VI. EXPECTED CHANGE IN THE SITUATION SHOULD NO ACTION BE TAKEN OR THE ACTION DELAYED

Site security will continue to be a problem; access is only partially restricted at this time. In addition, access is unlimited from the direction of the Mormon Slough, in which many people consistently fish. Some of the tanks and treatment cylinders are leaking and will be a continuing source of soil and groundwater contamination.

VII. OUTSTANDING POLICY ISSUES

There are no remaining outstanding policy issues.

VIII. ENFORCEMENT

See attached "Section VIII, Enforcement", which is enforcement confidential.

IX. RECOMMENDATION

This decision document represents the selected removal action for the McCormick & Baxter site, in Stockton, CA developed in accordance with CERCLA, as amended, and not inconsistent with the NCP. This decision is based on the administrative record for the site.

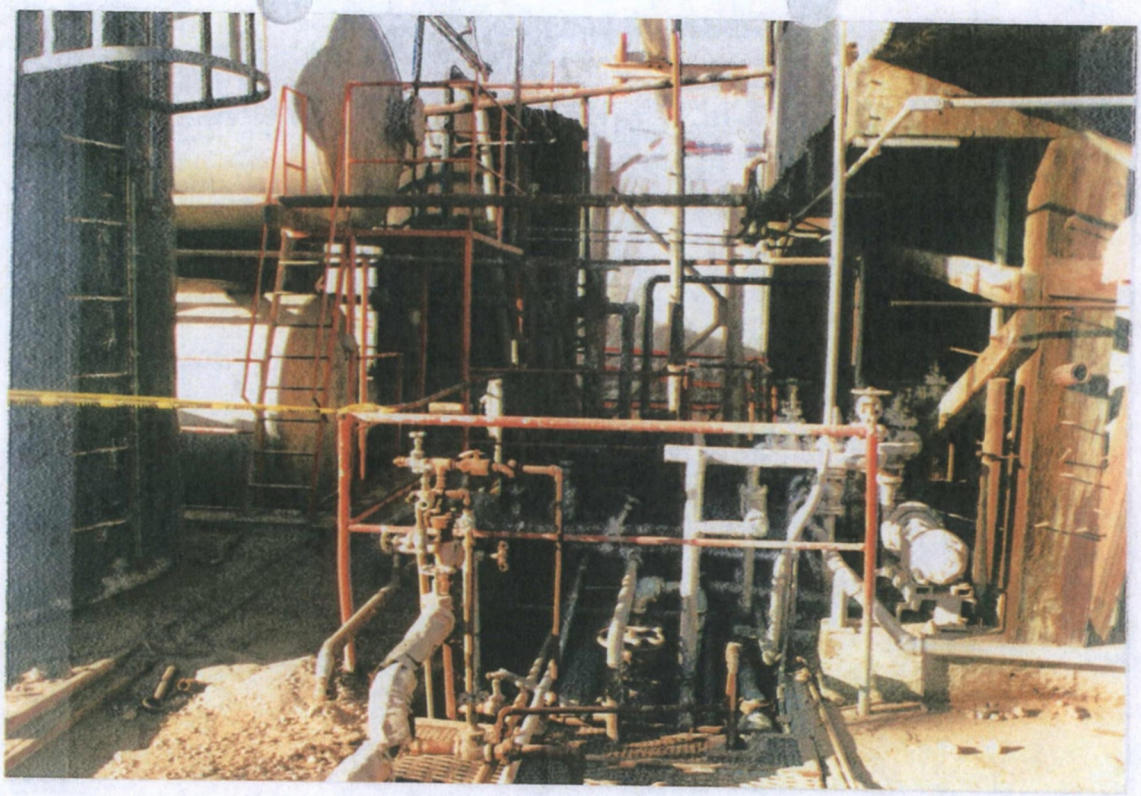
Because conditions at the site meet NCP Section 300.415 (b)(2) criteria for a removal, I recommend your approval of the proposed removal action. The total project ceiling is $561,000, of which $255,000 are for extramural cleanup costs (Regional Allowance). I recommend your approval to initiate response actions due to the nature of the threat described herein.

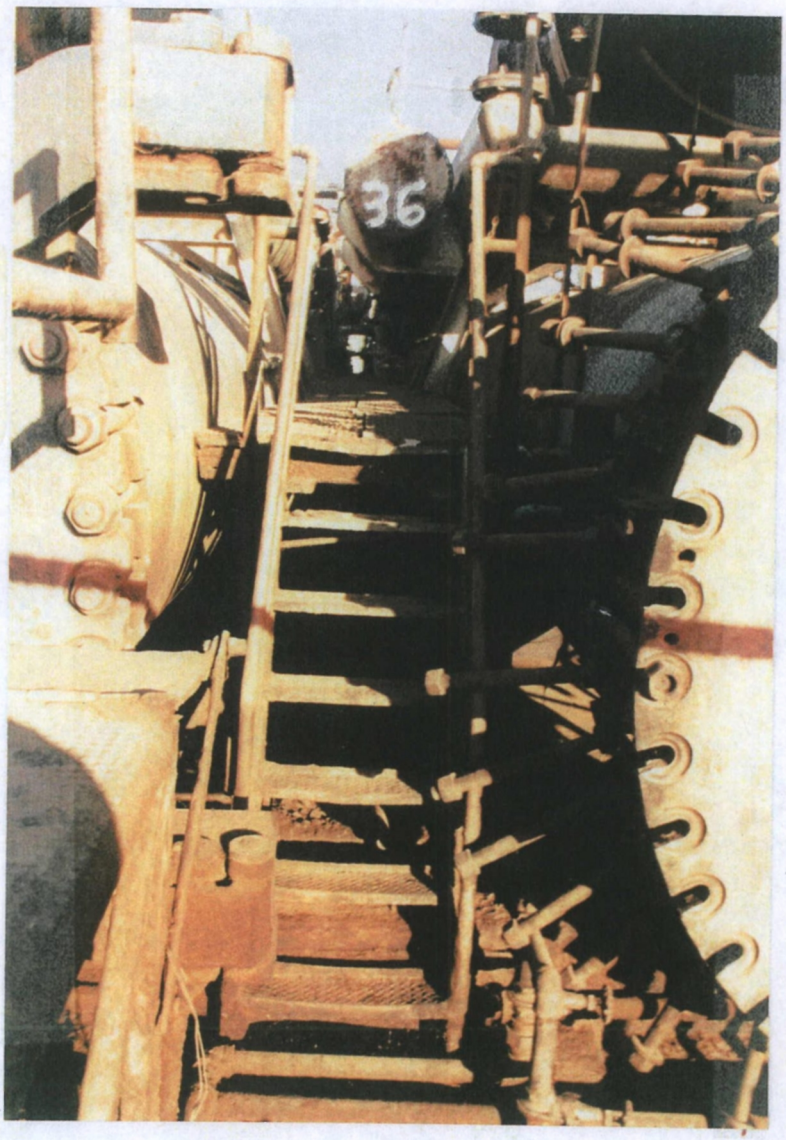
Approved: Karen Swain for JZelikson Director, HWMD Date: 6/23/92
(Name and Title)

Disapproved: _____ Date: _____
(Name and Title)

Deteriorating asbestos insulation on retort vessel and on ground. Also note sludge caked on equipment and sump beneath vessel. Photo by Brad Shipley November 1993.

More deteriorating asbestos on two retort vessels. Photos also show the hard to access sumps beneath the retorts. Photos by Brad Shipley November, 1993.





These photos show the general clutter lack of space and safety hazards from pipes and other equipment in process areas. Photos by Brad Shipley November, 1993.

The main body of tanks, mostly empty, are centrally located in the tank farm area. Photos by Brad Shipley November 1993.

Inaccessible sumps beneath a retort and adjacent to the main process area. Photos by Brad Shipley, November, 1993.

Miscellaneous equipment, structures
tanks and other debris left at the site.
Photos by Brad Shipley, November 1993.